

**G.3 Bills of Activities for the MHC Process**

## Activities Associated with the Bath Setup

Activity Description	Cost Driver	Cost/Activity
<b>Wear masks, goggles, rubber gloves, and suitable clothing</b>	<b>\$/bath setup</b>	<b>\$2.50</b>
Go to storage area	labor	
Locate protective equipment	labor	
Put on protective equipment	labor	
	protective equipment	
Return to tank	labor	
<b>Put in base liquid (usually water)</b>	<b>\$/bath setup</b>	<b>\$2.60</b>
Open water valve	labor	
Wait for measured amount	labor	
Close water valve	labor	
Document water amount/level	labor	
<b>Mix the bath solution</b>	<b>\$/bath setup</b>	<b>\$5.00</b>
Open the chemical containers	labor	
Add the chemicals to the bath	labor	
Turn on the agitator	labor	
Wait for mixing	labor	
Turn off the agitator	labor	
Titrate sample	labor	
Document	labor	
Repeat as necessary	labor	
<b>Flush containers</b>	<b>\$/bath setup</b>	<b>\$3.00</b>
Turn on water valve	labor	
Spray containers	labor	
Turn off water valve	labor	
<b>Place empty container in storage area</b>	<b>\$/bath setup</b>	<b>\$2.00</b>
Take container to storage	labor	
Documentation	labor	
Return to tank	labor	
<b>Total =</b>	<b>\$per testing</b>	<b>\$15.10</b>

## Activities Associated with the Tank Cleanup

Activity Description	Cost Driver	Cost/Activity
<b>Rinse with water</b>	<b>\$/cleanup</b>	<b>\$25.00</b>
Obtain spray/rinse equipment	labor	
Turn water on	labor	
Spray equipment	labor	
Turn water off	labor	
<b>Obtain scrubbing and cleaning tools</b>	<b>\$/cleanup</b>	<b>\$1.00</b>
Go to storage area	labor	
Find necessary tools	labor	
Return to tank	labor	
<b>Hand scrub tank</b>	<b>\$/cleanup</b>	<b>\$30.00</b>
Put on gloves, choose tool	labor	
Scrub tank	labor	
	cleaning supplies	
<b>Return cleaning tools</b>	<b>\$/cleanup</b>	<b>\$1.25</b>
Go to the storage area	labor	
Place tools in correct place	labor	
Return to tank	labor	
<b>Spray according to schedule</b>	<b>\$/cleanup</b>	<b>\$5.00</b>
Wait for time to elapse before spraying	labor	
Obtain spray equipment	labor	
Turn spray on	labor	
Spray all cleaning solution from tank	labor	
Turn spray off	labor	
<b>Operator opens control valve</b>	<b>\$/cleanup</b>	<b>\$1.00</b>
Find correct control valve	labor	
Open valve	labor	
<b>Water goes to treatment facility</b>	<b>\$/cleanup</b>	<b>\$2.75</b>
Wait for water to drain	labor	
<b>Operator closes control valve</b>	<b>\$/cleanup</b>	<b>\$1.00</b>
Locate correct control valve	labor	
Close valve	labor	
<b>Total =</b>	<b>\$per testing</b>	<b>\$67.00</b>

### Activities Associated with Sampling and Testing

Activity Description	Cost Driver	Cost/Activity
<b>Get sample</b>	<b>\$/testing</b>	<b>\$1.35</b>
Go to the line	labor	
Titrate small sample into flask	labor	
	materials	
Transfer to lab	labor	
<b>Test sample</b>	<b>\$/testing</b>	<b>\$1.35</b>
Request testing chemicals	labor	
Document request	labor	
Locate chemicals	labor	
Add chemicals to sample	labor	
	materials	
Mix	labor	
Document the results	labor	
Return testing chemicals	labor	
<b>Relay information to line operator</b>	<b>\$/testing</b>	<b>\$1.00</b>
Return to line	labor	
Inform operator of results	labor	
Document	labor	
<b>Total =</b>	<b>\$per testing</b>	<b>\$3.70</b>

## Activities Associated with Filter Replacement

Activity Description	Cost Driver	Cost/Activity
<b>Check old filter</b>	<b>\$/replacement</b>	<b>\$1.50</b>
Pull canister from process	labor	
Inspect filter	labor	
Decide if replacement is necessary	labor	
<b>Get new filter</b>	<b>\$/replacement</b>	<b>\$1.75</b>
Go to storage area	labor	
Locate new filters	labor	
Fill out paper work	labor	
Return to tank	labor	
<b>Change filter</b>	<b>\$/replacement</b>	<b>\$12.25</b>
Pull old filter from canister	labor	
Replace with new filter	labor	
	filter	
Replace canister	labor	
Fill out paper work	labor	
<b>Dispose of old filter</b>	<b>\$/replacement</b>	<b>\$2.00</b>
Take old filter to disposal bin/area	labor	
Dispose of filter	labor	
Return to tank	labor	
Fill out paper work	labor	
<b>Total =</b>	<b>\$per replacement</b>	<b>\$17.50</b>